Christa Wolf's Marginalia

Excerpt from 'Christa Wolf as a Philosopher of Science: Reframing Wolf's Representation of Science using Material Culture', a thesis by Amanda Stewart, submitted in partial fulfilment of the MPhil in Modern Languages at Oxford University, supervised by Prof. Georgina Paul.

Since Christa and Gerhard Wolf's private library was gifted to the *Arbeits- und Forschungs-stelle Privatbibliothek Christa und Gerhard Wolf* in 2015, books and other materials have been transferred from the Wolfs' Woserin Summerhouse and from storage in their Pankow residence to the Humboldt University of Berlin. The Woserin collection includes a broad range of international fiction and non-fiction. William Faulkner, Joseph Conrad, Virginia Woolf, Simone de Beauvoir, and Mark Twain stand alongside collections of Chinese philosophy, fairry tales from India and Corsica, short stories from Latin America, and legends from Africa, and many volumes include inscriptions addressed to Christa and Gerhard Wolf and contain annotations in their margins.

While the Wolfs' private library opens new research avenues in Wolf research, questions arise as to how this material should be treated in literary scholarship. In the first project of its kind, H. J. Jackson explored authors' marginalia in her 2002 study *Marginalia: Readers Writing in Books* (Jackson 2001), and in her more recent work on the subject, she offers several helpful considerations for analysing marginalia in literary scholarship. She defines marginalia as "manuscript additions to works written by somebody else" (Jackson 2016), and suggests identifying whether the marginalia can be dated, whether patterns emerge in the symbols and

marks that hint at the author's attitude towards the material, and whether the marginalia can be contextualised as part of the authors' broader intellectual life (Jackson 2016: p. 13).

The first methodological problem when utilising the Wolfs' private library is identifying whether marginalia ought to be attributed to Christa or Gerhard Wolf. Of the specific collection of texts relating to the theme of science, however, the penmanship in the margins is undoubtedly Christa Wolf's (see Figures 2 and 3 below), and loose papers found in the front cover of one of the texts include an invitation addressed to Christa Wolf.

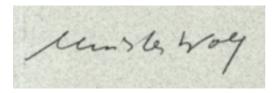


Figure 2: Christa Wolf's Signature, taken from the cover of 'Werke' (Hilzinger 1999)

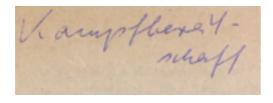


Figure 3: 'Kampfbereit-schaft' written on a slip of paper found in Illés Desi's "Das geheimnisvolle Gehirn" (1973)

While the marginalia cannot be dated precisely, there are several clues that at least some of the texts were used as part of Wolf's preparation for writing *Störfall*. The majority of the texts were published in the mid-1980s and *Störfall* opens with a Carl Sagan quotation, whose *Die Drachen von Eden: Das Wunder der menschlichen Intelligenz* is placed among the Woserin books. Furthermore, the content Wolf underlined in the Woserin texts corresponds with key themes that emerge in *Störfall*, including evolutionary biology and the structure and function

of the brain. In addition, amongst Christa Wolf's *Störfall* drafts housed in the *Akademie der Künste* archive, I discovered a page of hand-written notes, where Wolf copied citations describing the function of neurons and pathways within the brain (Wolf 1985-1987). This suggests that Wolf's process of writing *Störfall* included close readings of scientific texts, and an interest in the language used in scientific research to describe brain function.

The second methodological concern is that marginalia offer minimal evidence of the author's attitude towards the text. It can be difficult to ascertain whether the author's own views resonate with those of the text. Jackson recommends exploring whether certain markings suggest the author's attitude towards the material (Jackson 2016: p. 13), and while Wolf's markings are mostly simple underlinings, she occasionally placed an incredulous question or exclamation mark in the margin, and on one occasion she penned an emphatic 'No!' in the margin. Wolf also tended to mark pages with loose slips of paper, and occasionally wrote keywords in the margins, perhaps for her own later reference. Given the limited information that can be derived from marginalia, however, this thesis seeks to contextualise this material within Wolf's broader intellectual life by referring to Wolf's essays, fiction, and correspondence to further explore her 'philosophy' of science. The key insight of the private library is that Wolf immersed herself in reading material sourced within the natural sciences. In this brief overview of the marginalia discovered in the Woserin material, I am seeking to identify key themes that emerge in Wolf's marginalia, which can form the basis of contextualising the 'philosophy' of science that emerges in her work.

While most of the relevant Woserin texts were published in the mid-1980s, there are two notable exceptions. *Das geheimnisvolle Gehirn* (1973) by Illés Desi contains a chapter entitled "Was ist eigentlich das Bewußtsein?", which provides a technical explanation of the function

of "Nervenzellen" networks within the brain, which Wolf has underlined (Desi 1973: p. 135-7). Wolf has also bookmarked a page with a slip of paper bearing the handwritten note "Kampfbereitschaft" (see Figure 3), and she has underlined a passage that explains how we evolved the capacity for sympathy because it allowed us to cooperate and organise in response to conflict (Desi 1973: p. 58-9). *Das geheimnisvolle Gehirn* was published in 1973, and though the detailed description of 'Nervenzellen' and evolution appears in Wolf's *Störfall*, Wolf could have read Desi any time after 1973. The second anomalous text is *Der Ursprung des Bewusstseins durch den Zusammenbruch der Bikameralen Psyche* (1988) by Julian Jaynes, which Wolf must have read after the publication of *Störfall* in 1987. While Jaynes' original work was published in English in 1976, there is no evidence that Wolf read Jaynes before 1988.

Wolf has, however, closely read and underlined Jaynes' summary of several different definitions of 'consciousness', along with Jaynes' conclusion that we cannot rely upon our scientific/biological understanding of the brain to determine whether the brain is conscious (Jaynes 1988: p. 30). Beyond simply researching for *Störfall*, these underlinings in *Der Ursprung des Bewusstseins* indicate that Wolf continued to pursue an understanding of the scientific explanations for 'consciousness', as well as the limitations of such explanations, even after the publication of *Störfall*. Strikingly, *Der Ursprung des Bewusstseins* contains wording that echoes Wolf's own terminology for consciousness. She has underlined "Tiefen-Ich" and "blinder Fleck" (Jaynes 1988: p. 36-7) – both key terms that Wolf used in works published before Jaynes' 1988 text. In 'Lesen und Schreiben', for example, Wolf describes 'Tiefe' as "keine Eigenschaft, die an den Dingen haftet. Ihr Erlebnis ist an das menschliche Bewußtsein gebunden" (Wolf 1980a: p. 12). As Georgina Paul identifies, 'Tiefe' for Wolf represents a "psy-

chological category" (Paul 2012: p. 164). In *Störfall*, 'blinder Fleck' comes to represent the inability to recognise the ways in which hegemonic narratives of our time shape our thinking (Wolf 2001: p. 108-12).

Wolf also connects Jaynes' text to 'Selbstversuch'. She has written "Test für 'Selbstversuch' [...]!" in the margin of p. 49, in a section dealing with the ability to learn 'unconsciously', and again "Selbst-versuch!" is written alongside Jaynes' description of word association tests, which are thought to be able to test the subject's subconscious mind (see Figure 4). The technique was first devised in the late 1800s by Francis Galton as a means of revealing "the whole strata of mental operations that have lapsed out of ordinary consciousness", allowing the subconscious to be "recorded and treated statistically" (Galton 1889).

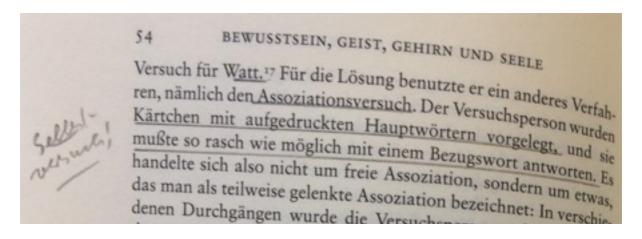


Figure 4: "Selbst-versuch!" pencilled in the margin of "Der Ursprung des Bewusstseins durch den Zusammenbruch der Bikameralen Psyche" (1988) by Julian Jaynes.

In 'Selbstversuch', Wolf's narrator is given a word association test to determine whether her changed gender has altered her mind and mental processing. As a man, she connects red with rage instead of love, "Auf 'Frau' nicht 'Mann', sondern 'schön'. Auf 'Kind' 'schmutzig' anstatt 'weich', und auf 'Mädchen' nicht 'schlank', sondern 'süß'" (Wolf 1980b: p. 204). The

'Selbstversuch', the narrator's regression to these clichés is more symptomatic of her attempt to perform her male gender. Wolf's notations in Jaynes' text, which she read after the publication of 'Selbstversuch' and *Störfall*, establish that Wolf was not only searching the Woserin texts for scientific language to replicate convincingly in *Störfall*. She continued to read scientific literature beyond 1987, attentive to interesting connections to her own writing.

Aside from Jaynes and Desi, the remaining annotated texts were all published in the 1980s and likely formed part of Wolf's preparation for Störfall. Across these texts, three common themes emerge from Wolf's marginalia. Firstly, Wolf paid close attention to neurological descriptions of brain function, as well as the evolution of the human brain. In Erwachendes Denken: Eine Entwicklungsgeschichte der menschlichen Intelligenz (1985) by Friedhart Klix, for example, Wolf underlined passages that refer to the functioning of 'Nervenzellen' as a response to both external and internal stimuli (Klix 1985: p. 54), as well as Klix's detailed descriptions of the high cognitive function of the frontal cortex (Klix 1985: p.109). In her copy of Zwischenstufe Leben: Evolution ohne Ziel? (1983) by Carsten Bresch, Wolf underlined Bresch's explanation of how neurons transmit electrical signals (Bresch 1983: p. 167). In her copy of Die Selbstorganisation des Universums: Vom Urknall zum menschlichen Geist (1986) by Erich Jantsch, Wolf underlined passages relating to the reptilian mind, and the evolution of the neocortex – a part of the cerebral cortex that enables logical, abstract thinking, and selfreflexivity (Jantsch 1986: p. 235). In Die Drachen von Eden, Wolf marked sections where Sagan describes the reptilian brain (Sagan 1978: p. 67) and explains which regions of the brain are associated with different mental processes (Sagan 1978: p. 43-5).

Similarly, in *Zwischenstufe Leben: Evolution ohne Ziel?* (1983), Wolf underlined Bresch's explanation that an important aspect of our evolutionary development is our ability to be an *individual*, i.e. to distinguish ourselves from the outside world (Bresch 1983: p. 183), as well as a passage explaining the evolution of our ability to cooperate (Bresch 1983: p. 94). Wolf's interest in our evolution, and particularly the idea that competition drove natural selection and helped the brain to evolve quickly (Bresch 1983: p. 196), likely relates to her project in *Störfall* to uncover the underlying reason for our self-destructive impulses (Wolf 2001: p. 91). This interest in self-destruction emerges, also, in Wolf's earlier *Büchner-Preis-Rede:* "daß die Lust, die das neue Zeitalter an sich selber fand, an ihrer Wurzel mit Zerstörungslust erquickt war" (Wolf 1986: p. 160).

The second key theme in the Woserin texts is the juxtaposition between primitive parts of our brain associated with automatic processing and unconscious thought and the higher-evolved parts of our brain associated with more complex cognitive function and rationality. This theme is inflected through much of Wolf's work in her exploration of 'Tiefe' or the 'psyche'. Wolf wrote to Hans Stoffels in 1971 that she developed an interest in the relationship between psyche and body from an early age: "[I]ch weiß es genau sei meinem vierzehnten Lebensjahr – die Beziehung zwischen dem, was wir mit dem Hilfsnamen 'Psyche' belegen und dem, was wir 'Körper' nennen, das brennend Interessanteste waren [sic]" (Christa Wolf, letter to Hans Stoffels, 19 May 1971). It is clear from the Woserin texts that Wolf explored this relationship between the body and psyche through biological and evolutionary explanations of the brain.

Thirdly, Wolf's marginalia also reveal an interest in the apparent value-neutrality of the natural sciences, and in the philosophy of science more broadly. Wolf annotated the sections of

Das Ende des naturwissenschaftlichen Zeitalters (1983) by H. Pietschmann that describe how scientific research is positioned as a process of objective observation, rather than subjective "Glaubensfragen" or "Gefühlsangelegenheiten" (Pietschmann 1983: p. 17). Pietschmann criticises the tendency within the natural sciences to eliminate contradictions and complexities from scientific modelling (Pietschmann 1983: p. 26), which Wolf has annotated, along with a blank slip of paper to mark the page. Wolf also underlined Pietschmann's claim that scientific language "erscheint uns ernster, wichtiger und realer als die erlebte Wirklichkeit" (Pietschmann 1983: p. 26), and that scientific language attempts to appear "wertfrei", "emotionslos", and "konfliktfrei" (Pietschmann 1983: p. 26). In her copy of Die Selbstorganisation des Universums: Vom Urknall zum menschlichen Geist, Wolf underlined Jantsch's similar reflection that it is ironic that "gerade eine sich als 'objektiv' aufspielende Wissenschaft dem subjektivsten Aspekt der Evolution, dem selbstreflexiven Geist, entstammt" (Jantsch 1986: p. 248). These annotations reveal that Wolf was reading philosophy of science that explored themes of apparent objectivity, the problem of certainty, and the attempt to reduce and eliminate complexities in order to construct a universally applicable theory.

It seems that Wolf may have been reading the Woserin texts with attention to the potential values hidden beneath the authors' objective descriptive language. In Sagan's *Die Drachen von Eden*, for instance, Wolf underlined Sagan's assertion that women's brains are 150 cubic centimetres smaller than men's, and that different races have differently sized brains (Sagan 1978: p. 46). Wolf marked sections where Sagan argues that given the extraordinary number of synapses in the brain, the sheer complexity of the human mind suggests that "jedes menschliche Wesen wirklich einzigartig [ist], und die Heiligkeit des individuellen menschlichen Lebens ist eine einleuchtende ethische Konsequenz" (Sagan 1978: p. 55). While there are no

question marks in the margin to clearly indicate that Wolf was sceptical of these comments, the two articles placed inside the front cover of *Die Drachen von Eden* suggest that Wolf was reading Sagan critically.

The two photocopied articles include "Die menschliche Persönlichkeit: ein wissenschaftliches und ein philosophisches Problem" (1981) by John C. Eccles (Eccles 1981), the 1963 Nobel Prize recipient for his research on the synapse ('Sir John Eccles – Biographical'), and two pages of an article by Bruno Preilowski entitled "Gehirn, Geist und Wertesystem" (Preilowski 1984). In Eccles' article, Wolf underlined Eccles' argument that the brain is analogous to a computer, while the psyche or the

linge mit ihren vollkommen getrennten ichbewud-Erfahrungen, so ähnlich sie dem Beobachter äufferlich erscheinen mögen. Die gleiche genetische Ausrüstung verträgt sich also mit unterschiedlich empfundenen Selbsten. Deraus geht hervor, daß die Erbmasse keine notwendige und ausreichende dingung für die Erlahrung der Einwaligkeit ist. schen Empfangnis und Geburt, die Einzigartigkeit des emplindenden Selbst, während es Ich-Bewußtsein und menschliche Persönlichkeit entwickelt, aber es bleiben viele verblüffende Fragen offen, die gewohnlich nicht gestellt werden. Zum Beispiel welchem Stadium ihrer Evolution erwarben die Ho-Tod eintrict, ehe sie sich in Ich-Bewußtsein und Persönlichkeit ausdrücken kann? In welchem Entwickbungsstadium erwirbt der Embryo eine Seele? Was geschieht, wenn sich im Embryo eine große Abnormtät des Gehirns entwickelt, wie die anencephole ldiotie oder ein Monster mit zwei Köpfen? Ich verzichte auf Spekulationen über so obskure Gebiebe and beschränke mich auf die Feststellung. Beseelung schrittweise erfolgen könnte, und daß sie nicht unmittelbar bei der Empfängnis stattfinden kann, weit wir sonst Schwierigkeiten mit der Dualität der Seelen eineitger Zwillinge bekämen.

soul is its programmer, which he characterises as God's creation (Eccles 1981: p. 235). Wolf might have been sceptical of this separation of the body from the mind (or 'soul'), and she underlined these explanations and pencilled an exclamation points and question marks in the margin (see Figure 5). Eccles proceeds to argue that identical twins, while genetically similar, have individual souls, and that the soul is implanted in the foetus before birth, beside which Wolf has pencilled multiple exclamation points, and "No, no!" in the margin (see Figure 5). In the second article, an excerpt from "Gehirn, Geist und Wertesystem", Preilowski criticises how scientific theories of the mind are used to confirm belief in a religious 'soul', as a result of the scientists' own religious beliefs (Preilowski 1984: p. 216). Wolf's pencilled exclamation points and question marks alongside Eccles' work indicate that she was sceptical of the

extent to which his science was 'value-free'. She was reading philosophy of science debunking the apparent objectivity of science, while also identifying the religious beliefs, sexism, and racism concealed beneath Sagan's and Eccles' 'scientific' claims.

The Woserin shelves provide insight into Wolf's process of research into the function of the brain, evolutionary biology, and the philosophy of science. Within the existing scholarly literature, Wolf's interest in science is often framed in literary terms, while the influence of scientific thinkers has not yet been examined. This is exemplified in recent scholarship that interprets illness in Wolf's writing as a metaphor for broader societal ills. Sonja Klocke's recent book on the subject argues, for example, that Wolf's portrayal of illness exposes "imperfections and inconsistencies of the socialist state" (Klocke 2015: p. 2), and the body serves as a "symbolic space[] where political conflicts and the individual's struggles play themselves out in Wolf's oeuvre" (Klocke 2015: p. 2). Carol Anne Costabile-Heming's 2010 article demonstrates how Wolf's representation of illness evolves in her post-reunification works, including Leibhaftig (2002), where illness is not only an insinuated commentary on the GDR but used to symbolise self-exploration (Costabile-Heming 2010). Illness serves different narrative functions in Wolf's work, and although Klocke and Costabile-Heming build strong cases for its symbolic function, there is a tendency to reduce Wolf's portrayal of science to a literary metaphor while overlooking the more substantive aspects of her critique of medical science.

Wolf's marginalia suggest that Wolf was earnest in her attempt to grapple with quite technical and theoretical concepts within the philosophy of science. Interpreting her evocation of science as simply literary or metaphorical overlooks the ways in which she was attempting to communicate concretely with her reader, and with the scientific community, on a range of

issues in science. In a letter to Charlotte Wolff, Wolf recounts the 'Gespräche' she held with groups of people from different backgrounds:

Ich hatte jetzt mehrere Gespräche über meine Arbeit mit kleineren Gruppen von Leuten – Literaturwissenschaftler, Bildhauer, Psychiater. Alle verschieden. Aber in allen ist die Frage ganz lebendig: Wie müssen wir leben, was müssen wir tun, um den destruktiven Kräften auf dieser Erde zu begegnen, um selbst produktiv zu sein (Wolf and Wolff 2004: p. 62).

Wolf describes an impulse to speak to broad themes, and a broad audience, beyond the literary world. The Woserin shelves serve to demonstrate the potential value of a thorough investigation into Wolf's connections with the scientific community.

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